

THE CLAIMS

What is claimed is:

1. A method for restoration of a patient's tooth which comprises:
generating an electronic image of a patient's tooth in a dentist's office, wherein the image includes color information representative of the patient's tooth shade; and
forwarding the electronic image to a dental laboratory, wherein a technician evaluates the image and suggests restorative options to the dentist.
2. The method of claim 1 wherein the dentist forwards to the laboratory a preliminary treatment plan along with the electronic image, and the laboratory technician provides feedback on the treatment plan.
3. The method of claim 2 wherein the image includes information about the patients' tooth color, the preliminary treatment plan includes a determination of at least one matching shade of material to restore the tooth, and the technician either confirms the dentist's determination of restoration material shade or suggests an alternative shade.
4. The method of claim 3 which further comprises electronically storing color information representative of a plurality of tooth shades on a computer at the dentist office; and comparing the color information of the image with the stored tooth shade color information to identify one or more tooth shades having a combined color that corresponds to the patient's tooth shade before sending the identified color(s) to the laboratory.
5. The method of claim 4 wherein the image of the patient's tooth is automatically compared to the stored tooth shade color information electronically by the computer.
6. The method of claim 4 wherein the image of the patient's tooth is electronically displayed with color pixels to assist in determining the color of the patient's tooth shade.

7. The method of claim 6 wherein the patient's tooth shade is determined by selecting one or more pixels of the image, which pixels correspond to differential spatial locations of the patient's tooth, that provide similar color information and electronically comparing that color information with the stored tooth shade color information to determine the color of that portion of the patient's tooth.

8. The method of claim 7 wherein selection of the pixel(s) is repeated until a tooth shade color is determined for all spatial locations of the image of the patient's tooth, with the patient's tooth shade being determined by averaging the color information at selected pixel locations of the image before electronically comparing the averaged color information with the stored tooth shade color information.

9. The method of claim 4 which further comprises utilizing a digital camera to obtain the image of the patient's tooth and utilizing the same camera to obtain the color information of the tooth shades before electronically storing the color information.

10. A method for restoration of a patient's tooth which comprises:
generating an electronic image of a patient's tooth or tooth preparation in a dentist's office, wherein the image includes color information representative of the patient's tooth shade; and
forwarding the electronic image to a dental laboratory by direct computer link or e-mail, wherein a technician evaluates the image and suggests restorative options to the dentist.

11. A method for restoration of a patient's tooth which comprises:
generating an electronic image of a patient's tooth preparation in a dentist's office, wherein the image includes color information representative of the patient's tooth shade; and
forwarding the electronic image to a dental laboratory, wherein a technician evaluates the image and suggests restorative options to the dentist, including whether further preparation is required.

12. The method of claim 11, wherein the dentist or technician accesses an interactive website to review step-by-step procedures to determine an appropriate restorative procedure and to obtain feedback for any specific dental needs for the patient's tooth.

13. The method of claim 11, wherein the laboratory technician suggests restoration materials and treatment modalities for completing the restoration of the patient's tooth.

14. The method of claim 13, wherein the dentist accesses an interactive website to obtain preparation information, identify tools to carry out the preparation, or to identify sources where tools or materials for use in the restoration may be obtained.

15. The method of claim 11 wherein the laboratory technician prepares a dental prosthesis; takes an image of the prosthesis; and compare the prosthesis image to the image provided by the dentist before the prosthesis is permanently placed in the patient.

16. The method of claim 15 wherein the laboratory manufactures the prosthesis utilizing a plurality of porcelain coatings.

17. The method of claim 15 wherein the image of the prosthesis provides color information that is compared to the image of the patient's tooth to confirm color matching.